23. Protein according to claim 10, characterized in that it a) is the product of viral, prokaryotic or eukaryotic expression of exogenous DNA, b) is coded by sequences SEQ ID no. 1, 3 or 5 or is coded by DNA sequences which hybridize with DNA sequences SEQ ID no. 1, 3, 5 or fragments of these DNA sequences in the DNA region which codes for the mature protein, or c) is coded by DNA sequences which would hybridize without degeneration of the genetic code with the sequences defined in b) and which code for a polypeptide with a corresponding amino acid sequence.

Q4

REMARKS

Claims 1-23 remain in the application. Claims 6, 7, 8, 11, 12 and 18 have been amended. Claims 19-23 have been added. The filing fee has been calculated according to the above-amendments.

Should the Examiner have any questions or comments regarding the amendments, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

Warren B. Kice
Registration No. 22,732

Dated: 3/22/01

HAYNES AND BOONE, L.L.P.
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: 214/651-5634
Fax: 214/651-5940
Docket Number: 12964.23
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This paper and fee are being deposited with the U.S. Postal Service Express Mail Post Office to Addressee service under 37 CFR §1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re application of: Jomaa | § | Attorney Docket No.: 12964.23 |
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| For: GENES OF THE 1-DEOXY D-XYLULOSE BIOSYNTHESIS PATHWAY | § | |

Attention: DO/EO/US
Commissioner For Patents
Washington, D.C. 20231

REDLINE VERSION FOR PRELIMINARY AMENDMENT

6. (Amended) Process for the production of transgenic viruses, eukaryotes and prokaryotes for modifying the isoprenoid content, [characterised] characterized in that a DNA sequence according to claim 4 [or 5] is transferred and incorporated into the genome of viruses, eukaryotic and prokaryotic cells with or without use of a vector.

7. (Amended) Transgenic systems, in particular plants and plant cells which contain one or more DNA sequences according to one of claims 1 to [5]3 as "foreign" or "additional" DNA, which sequences are expressed.

8. (Amended) Expression vector containing one or more DNA sequences according to one of claims 1 to [5] 3.

11. (Amended) Protein according to [one of] claim[s] 9 [and 10], [characterised] characterized in that it a) is the product of viral, prokaryotic or eukaryotic expression of exogenous DNA, b) is coded by sequences SEQ ID no. 1, 3 or 5 or is coded by DNA sequences which [hybridise] hybridize with DNA sequences SEQ ID no. 1, 3, 5 or fragments of these DNA sequences in the DNA region which codes for the mature protein, or c) is coded by DNA sequences which would [hybridise] hybridize without degeneration of the genetic code with the sequences defined in b) and which code for a polypeptide with a corresponding amino acid sequence.

12. (Amended) Protein according to one of [the preceding] claims 1-3, 6, 9, 10, 11, 22 and 23 [characterised] characterized in that it comprises the amino acid sequences SEQ ID no. 2, 4 or 6.

18. (Amended) Use of DNA according to one of claims 1 to [5] 3. [or of proteins according to one of claims 9 to 12 or of transgenic systems according to claim 7 for the prevention or treatment of diseases in humans and animals.]